

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Reissue Application of:

Tomowaki TAKAHASHI

U.S. Patent No.: 5,808,805

Group Art Unit:

Issued: September 15, 1998

Examiner:

For: EXPOSURE APPARATUS HAVING CATADIORPTRIC PROJECTION  
OPTICAL SYSTEM

**REISSUE APPLICATION DECLARATION UNDER 37 C.F.R. § 1.175**

Assistant Commissioner for Patents  
Washington, D. C. 20231

Sir:

I, Tomowaki TAKAHASHI declare that:

1. My residence, post office address and citizenship are as stated below next to my name.
2. I believe I am the original, first inventor of the subject matter which is described and claimed in U.S. Letters Patent No. 5,808,805 ("the '805 patent") granted on September 15, 1998, and for which invention I solicit a reissue patent on the invention entitled EXPOSURE APPARATUS HAVING CATADIORPTRIC PROJECTION OPTICAL SYSTEM, the specification of which is attached hereto.
3. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims as amended in the attached reissue application.

4. I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

5. I hereby claim priority benefit under Title 35, United States Code, Section 119(a)-(d), of Japanese patent application no. 6-090837, filed April 28, 1994.

6. I believe the original '805 patent to be wholly or partly inoperative or invalid by reason of claiming more or less than I had the right to claim in the patent.

7. With respect to broadening the claims, one error being relied upon as the basis for the reissue is that issued claims 1, 6, 10, and 23 are unduly narrow for reciting a catadioptric imaging optical system comprising first and second groups having positive refractive power. As such, claim 26 has been drafted to recite a catadioptric imaging optical system comprising "said first imaging optical sub-system comprising a first group with a lens, and a second group with a concave mirror." In addition, issued claim 25 is unduly narrow for reciting a fabricating device method comprising projecting a pattern using the "catadioptric optical system according to claim 1," and thus incorporates the first and second groups having positive refracting power. As such, claim 35 has been drafted to recite a method of imaging a pattern on a mask onto a substrate comprising "guiding a light from the mask to a first group, wherein the first group comprises a lens, " and "guiding the light from the first group to a second group, wherein the second group comprises a concave mirror."

8. All errors, including those listed above, which are being corrected up to the time of filing of this reissue declaration arose without any deceptive intention on the part of the applicant (37 CFR §1.175(a)(2)).

9. I hereby appoint the attorneys and/or agents of Staas & Halsey LLP under USPTO Customer No. 21,171 to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Please send all correspondence related to the above-identified application to the following address:

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Washington, D.C. 20001



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PATENT TRADEMARK OFFICE

10. I hereby declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first or sole inventor Tomowaki TAKAHASHI

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

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